

Notice of Allowability

Application No.

10/028,759

Examiner

Matthew Landau

Applicant(s)

PARK ET AL.

Art Unit

2815

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed July 9, 2004.
2. ☒ The allowed claim(s) is/are 11-20.
3. ☒ The drawings filed on 28 December 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with James Eller (Reg. #39,538) on August 9, 2004.

11. (Amended) An array substrate for a transflective liquid crystal display device, the substrate comprising:

- a gate line and a data line defining a pixel region by crossing each other;
- a switching element at a crossing portion of the gate line and the data line;
- a first passivation layer covering the switching element and the data line, the first passivation layer being formed of an inorganic insulating material;
- a reflective electrode on and directly contacting the first passivation layer, the reflective electrode including a transmission hole;
- a second passivation layer on an upper surface of the reflective electrode, the second passivation layer being formed of organic insulating material and patterned to expose a part of the switching element; and
- a transparent pixel electrode on and directly contacting the second passivation layer, the pixel electrode being formed in the pixel region and contacting the exposed part of the switching element.

Drawings

Amended drawing sheets were received on February 3, 2004. These drawings are unacceptable. As requested by Applicant, the original drawings filed December 28, 2001 will be used in lieu of the amended drawing sheets.

Allowable Subject Matter

Claims 11-20 are allowed.

In regards to claim 11, the following is an examiner's statement of reasons for allowance: the prior art of record, either singularly or in combination, does not disclose or suggest the combination of limitations including a second passivation layer on an upper surface of the reflective electrode. Note that Figures 10 and 11 of US Pat. 6,501,519 disclose all the claim limitations except that the second passivation layer 134 is on a lower surface of the reflective electrode 118.

In regards to claim 16, the following is an examiner's statement of reasons for allowance: the prior art of record, either singularly or in combination, does not disclose or suggest the combination of limitations including forming a second passivation layer on the reflective electrode.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ha et al. (US Pat. 6,501,519) discloses an array substrate with an inorganic first passivation layer, a reflective electrode on and directly contacting the first passivation layer, and an organic second passivation layer on the reflective electrode.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew C. Landau whose telephone number is (571) 272-1731.

The examiner can normally be reached from 8:30 AM - 5:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Thomas can be reached on (571) 272-1664. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.


GEORGE ECKERT
PRIMARY EXAMINER

Matthew C. Landau

Examiner

August 9, 2004